LOADSTAR LETTER #26

September 1995 companion newsletter for LOADSTAR #136, the world's longest running C-64 magazine.

To Be Or Not To Be Geos tm

by Jeff Jones. A number of users have corrupted their LOADSTAR disks by attempting to convert them into GEOS disks. As all GEOS users know, the desktop will ask you if you want to convert a non-GEOS disk into a geos disk. T*his should* ***never*** *be done to a LOADSTAR disk or any commercial disk that you have purchased from a software publisher.*.

Converting a disk to a GEOS disk *alters* the disk. As is stated month after month on our disks, users should *never* alter their LOADSTAR disks. Doing so opens up the possibility of corrupting your disk. LOADSTAR disks are often full, and converting a disk to a GEOS disk requires the allocation of free blocks. Also LOADSTAR disks may have 144 files (on 5.25-inch disks) or 296 files (on 3.5-inch disks). Conversion to GEOS format allocates 8 file slots, which may wipe out file entries on your LOADSTAR disk, making parts of it unusable. Some important points to remember:

1. Never ever alter your LOADSTAR disk.
2. You can use GEOS on a disk without converting it.
3. LOADSTAR disks are usually too full to convert.
4. GEOS features are meant to be copied to your GEOS data disks before using. ❑

Safety Recommendations

07/24/95 NORTHBROOK, ILLINOIS, U.S.A., 1995 JUL 24 (NB) -- With the warm temperatures and sun of summer comes lightning and thunderstorms that can damage sensitive electronic equipment like computers, fax machines, and the like, said Underwriters Laboratories (UL). The company is recommending measures to protect electronics in the home environment.

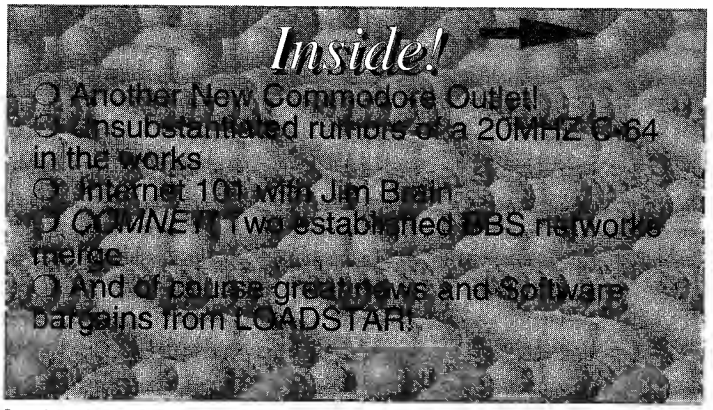
"If you talk to people in electronics and computer stores, you'll find horror stories about how during lightning storms customers have had damaged televisions or computers," Teresa Hrones, UL spokesperson, told Newsbytes. "Any time you live in an area that experiences strong lightning storms, you're going to find some electronic equipment is going to be affected."

An average lightning strike carries up to 24,000 amperes (amps) of current, the company said, while a typical home is wired to draw up to 200 amps. Even an indirect, nearby lightning strike can be enough to knock out electronics by entering the home via electrical lines, or even by puncturing the protective insulation of individual wires. To combat this, UL recommends consumers use surge arresters that the company certifies. Surge arresters divert energy to the earth.

Another way to beat power spikes are with surge suppressers, UL said. However, surge suppressers are not lightning protection devices for whole homes. They can be attached to equipment to protect from voltage surges caused by occurrences like a utility pole downed by a car or storm. Surges can also come from inside the home, from equipment like furnaces or exercise equipment.

A way to beat lightning strikes is with a lightning protection system, such as lightning rods. These are connected by heavy cables to provide a path for the lightning to travel safely to the ground. UL recommends that both the lightning protection system and the people installing it are both UL certified.

UL officials said complete lightning protection is available only when all three elements of a lightning protection system, surge arresters, and surge suppressers, are present.❑ (Bob Woods/19950724/Press Contacts: Underwriters Laboratories, 708-272-8800, Teresa Hrones ext 43436)



Repetitive Injury Case Against Apple Dismissed

08/04/95 CUPERTINO, CALIFORNIA, U.S.A., 1995 AUG 4 (NB) -- Another repetitive stress injury (RSI) case has been settled in favor of the computer industry. The most recent, a case filed against Apple Computer (NASDAQ:AAPL) by Carolyn Brust, was dismissed by the court before Apple presented a defense.

Copyright 1995 by Softdisk Publishing. LOADSTAR is a monthly "magazine on disk" for the Commodore 64/128. Subscribers receive two 1541 disks (or one 1581 disk) in their mailbox every month filled with news, articles and programs. These non-PD, high-quality programs. Subscription prices are $69.95 for a 12-month subscription or $19.95 for a 3-month subscription. You may also elect to subscribe "by the month", where we charge your credit card $7.95 for each issue *after* it's shipped. The Loadstar Letter is published monthly by Softdisk Publishing as a companion to LOADSTAR and LOADSTAR 128 Quarterly. No part of this newsletter may be reproduced without the permission of Softdisk Publishing. Newsbytes stories are licensed from the **Newsbytes News Network, and are exclusively copyrighted by Newsbytes**. Softdisk cannot give permission to reprint Newsbytes articles. LOADSTAR LETTER contacts: INTERNET: LOADSTAR@GENIE.GEIS.COM GEnie: LOADSTAR US MAIL: ATTN Jeff Jones, Softdisk Publishing P.O. Box 30008, Shreveport, LA 71130-0008 318/221-8718. Fax 318/221-8870. BBS 1-318-425-4382. Leave feedback or email "Jeff Jones" 2400/8n1. N.I.S.S.A.

Five days into the trial in which Brust claimed use of an Apple keyboard and mouse were the cause of her diagnosed RSI condition, Judge James L. Warren dismissed the case for lack of evidence. From his San Francisco Superior Court bench, Warren ruled there was no scientific basis which would allow the court to conclude her injuries were caused by use of an Apple computer.

Pam Miracle, spokesperson for Apple, told Newsbytes, "We are pleased with the judge's decision. It continues to support the fact that there is no correlation between RSI and keyboard and mouse devices when properly used. This is good news for the entire computer industry."

Newsbytes was able to speak to Carolyn Brust and learned she was disappointed with the outcome, but not shocked by the decision. "I am very pleased and proud of my counsel and our expert's testimony." Ms. Brust says she sustained her repetitive injury from her work on Apple computers as a graphics designer from 1988 to 1992.

Continuing, she said, "My life has changed because of this injury. I am no longer able to work as a graphics designer and have had to retrain for a new career." Brust now works in computer sales and uses voice recognition technology to enhance her computer operations.

According to Brust, the decision was based on the Frye ruling. "Apple made a motion that our expert testimony not be allowed based on the Frye case," said Brust. The Frye case is a ruling which dates back to 1923. An independent source, Jon Metcalf who is an associate of Jackson & Wallace in San Francisco, told Newsbytes, "The Frye test or ruling says the court held that with scientific evidence it must be shown that the underlying scientific principle is sufficiently established to have gained general acceptance in the particular field in which it belongs."

"After hearing the expert testimony the judge said he would be making a guess since the scientific evidence was not there to support our expert testimony. He also said if there was a jury in this case he would not allow our expert's testimony," said Brust. In particular she referred to the use of the mouse device. "The problem is: how can one assemble tests which may take three or four years to assemble the required proof? People are getting hurt and I do not know what it is going to take to change the situation," she continued.

In a final comment she said, "I have to get on with my life. I had hoped this case would bring attention to the injuries which are being caused by operating computers. These injuries can be prevented by proper use and exercises and the computer industry needs to incorporate the proper education for all users of its equipment." ❑ (Patrick McKenna /19950804/Press Contact: Betty Taylor, Apple Computer, 408-974-3983)

Local Entrepreneur Opens Shop, Includes Commodore Stock

by Jeff Jones. It rarely happens anymore. A computer store that caters to everyone -- even non-PC users. Bo Fain, without whom there would be no LOADSTAR BBS, has bitten the bullet and opened his own computer store, complete with a line of hard to find C-64 and C-128 hardware and software.

Centsible Systems, not to be confused with Centsible Software, will open for business in Shreveport. It's a family business, owned and operated by Bo and his wife, Joyce. The store will officially open Saturday, September 9, 1995 at 8AM following a short ribbon-cutting ceremony.

According to Bo, "We wholeheartedly invite mail orders and encourage Commodore users to call occasionally for inventory updates and changes. In addition to a voluminous Commodore inventory, the store will stock a full line of used PC computers as well as accessories for them. The concept behind the store is to put good workable systems into the hands of people who, up to now, have not purchased a computer due to the high price. We feel that today's computers cater to the "established" computer user crowd. Many folks find today's PCs a bit of an overkill when all they want to do is keep a recipe book, genealogy program, word processor, and phone book. For many, the high memory, massive hard drives, and multimedia, multi-tasking units of today are a waste. They just don't need all the frills. We hope to offer them the basic systems they need at an unheard of low price! For instance, XT compatible systems will start at only $95! We can also accommodate the demanding high tech user! We can build a multimedia 486 complete with double speed CD-ROM, Soundblaster 16 card and speakers, 4 megs of RAM, 3.5" Floppy, 170 meg hard drive, internal 2400 baud modem, keyboard, and mouse, for around $995! Not bad eh?"

"We will also have BARGAIN prices on new disks, both 3.5 and 5.25, in high and low densities!Shipping/handling charges will depend on weight of box and whether or not it is to be shipped ground or air. We use UPS for this. Small orders such as a game disk will be mailed via U.S. Postal Service."

The following is a brief overview of Commodore hardware and software currently onhand at Centsible systems:

```
Commodore Keyboards
C-64 (tan) w/power supply......$35
w/JiffyDos (when available)....$55
64C (white) w/power supply.....$55
w/JiffyDos (when available)....$75
C-128 with power supply........$75
w/JiffyDos (when available)....$95

Commodore Disk Drives
1541/1541-C....................$35
w/JiffyDos (when available)....$55
1541-II w/power supply.........$45
w/JiffyDos (when available)....$65
1571...........................$55
w/JiffyDos (when available)....$75
1581 with power supply.........$65
w/JiffyDos (when available)....$85
Commodore Brand Printers
(all)..........................$50
C= Seikosha (SP-1000VC)........$75
Star (NX-1000C)................$95
Monitors
Samsung 40 column color........$60
C= 1702/1802 40 col color......$75
C= 1902/1902A 40/80 col color..$95
C=1084/1084S 40/80 col color..$125
Commodore Software
All games Commercial w/dox.....$5
All others.....CALL
Cart Games and Education........$5
Other Cartridges.............CALL
```

Centsible Systems, 7808 Jewella Ave. Suite G-1, Mailbox #11, Shreveport, LA 71108, (318)-687-4613 ❑

Rumors Spread About New 16-20MHZ C-64 Accelerator

by Jeff Jones. LOADSTAR first received rumors of the 20MHZ 64 last year in a letter from a person who had actually pieced together a 20+MHZ C-128. Now rumors are flying anew of a major manufacturer fiddling around with such a contraption in cartridge accelerator form..

For those who may think a 20MHZ C-64 would be slow, it would probably be faster than486s -- in theory. LOADSTAR has only begun to investigate this and all manufacturers have been quiet, even secretive, but I get the impression there *may* be something to this rumor. Keep your eyes open. We'll keep you posted.

C-Net Joins Image, DS/2, Forms CommNet

by Jeff Jones with help from Fred Kruger@BLR. The message base at LOADSTAR's Image BBS recently became a lot busier. So busy in fact that I had to begin weeding message a mere seven days

Continued on Page 4 ➔

LOADSTAR SOFTWARE VALUES!

The Compleat* Series

The Compleat PRINT SHOP I: (The Print Shop by Broderbund or Printmaster required). Over 1300 artistic and never before published PRINT SHOP images. The smart, fast software package included allows you to quickly scan through the many PRINT SHOP images sequentially, by name, or by group number. Press a key and save the graphic you want in 2-block, 3-block and even PRINTMASTER graphic files! All that plus a printed guide to your new sea of graphic files. And if you like the first volume, you'll probably want to get your hands on **The Compleat PRINT SHOP II**, which also contains over 1300 PRINT SHOP images, previously published on LOADSTAR issues over the past ten years. Included is the same smart, fast software package included in The Compleat PRINT SHOP I. Each volume is $20.00.

The Compleat Programmer: Become the Commodore programmer you've always wanted to be! Megabytes of knowledge crammed and stuffed onto eight 5.25-inch disks or two 1581 disks! Plus we include all the tools, extensions, languages, assemblers, tutorials and utilities you'll need to create the same type of software you see on LOADSTAR! This massive collection is way over two megabytes of instructional text and valuable tools. $20.00. For $5 more, get C= Hacking MAG, not available separately, to complete your programming set.

The Compleat Maurice: A compilation of 26 solitaire card games written by Maurice Jones, the acknowledged master of card game simulations for the C-64/128. There's even a brand new, never before published game called Boomerang. Two 5.25 inch disks or one 3.5 inch disk. $20.00 postage paid!

The Compleat Dave: Two 1581 disks or three 1541 disks crammed with SID music. Over 250 classic melodies from yesteryear, arranged and transcribed by the Master of Music, Dave Marquis, and now they're available in one gigantic 8-hour collection. If you enjoy SID music, you owe it to yourself to get THE COMPLEAT DAVE. Two 1581 disks or three 1541 disks $20.00 postage paid!

The Compleat Walt: Ten years of Walt Harned's slideshows and multimedia events gathered into one huge collection: Seven 5.25-inch disks or three 3.5 inch disks! Over 250 pictures, including some that have never been published. The greatest one-man collection of art on any computer platform! $20.00 postage paid!

The Compleat Roger: 25 educational quiz programs, each carefully crafted by Roger Norton, an educator who uses C-64s. These programs come crammed on two 5.25-inch 1541 disks or one 1581 disk. $20.00 postage paid!

*** No, we didn't misspell "complete." Compleat is the ten dollar spelling of complete.**

Other Products

Geopower Tools - 19 Geos utilities: Calendar Printer, Fast Format, Geo Fetch (grab any portion of a screen as a Photo Scrap), Phoenix (resurrect a trashcanned file), Programmer's Calculator are just a few of the handy tools. Side Two is filled with Clip Art (in Photo Album format) and fonts. $9.95 (C-64/128) Item #080525

Songsmith - LOADSTAR's own music-making program. With this deluxe music editor/player you can easily transcribe music from sheet music or make up your own tunes. Songsmith comes with a slick 30-page manual and a jukebox player with eight tunes. $9.95

Game Star #1 8 games from LOADSTAR #70-#100). The Tenement, Stack 'Em, The Sherwood Open, Gems, Stealth Bomber, Eagle Eyes, Moonraker & Circuitry. $9.95

Just For Fun - Eight original games. There are arcade games, educational games, puzzle games and just games that are just plain fun on this disk. $9.95

Fun Four - Four original games. A huge maze game, trivia game, solitaire and a space shoot 'em up -- all runnable from a menu. $9.95

Sport - In the early days of science, "sport" meant "mutant." This is a full novel on C-64 disk by author, Jeff Jones, about a murderous neo-human. Over 500 terrifying pages. Automatic presentation software included. Printing capability. Bookmarks. Warning! This is a *real* novel with strong content, frank language, violence and adult situations. If the hard-hitting action of *real* sci-fi/horror novels turns your stomach, please don't buy this book. Must be 18. 1 CMD HD disk , 2 3.5-inch disks or 3 5.25-inch disks. $5.95 $1.00 Shipping.

Brainpower/Brainstorm - 80-column word processor and idea processor for the C-128. These two programs are together on one disk. It comes with a detailed 32-page manual. $9.95 (C-128 only) Item #069421

Best Of Loadstar Compilations: LOADSTAR is 136 months young! We have 5 anthology disks that take you through the evolution of LOADSTAR, from humble beginnings to the well-oiled machine we've become. If you want to hop on a time machine and go back, start with **The Best Of LOADSTAR #5** and move your way back to **The Best Of LOADSTAR #1.** Each of the 136 back issues are available for purchase with discounts on large orders for you collectors out there. Best Of LOADSTAR disks are available on 5.25-inch disks only. C-64 disk. $9.95.

Master Base - Database of users' groups for the 80-column C-128. This is a fast, powerful database program for handling addresses and mailing labels (includes barcode printing). The disk also has a file of over 600 users' groups addresses. $4.95 (C-128 only)

LOADSTAR is a monthly "magazine on disk" for the Commodore 64/128. Subscribers receive two 1541 disks (or one 1581 disk) in their mailbox every month filled with news, articles and programs. These non-PD, high-quality programs are written by the best home-based programmers in the field and edited by the crack LOADSTAR team of Fender Tucker and Jeff Jones. Subscription prices are at an all-time low of $69.95 for a 12-month subscription, or $19.95 for a three-month subscription. You may also elect to subscribe "by the month," where we charge your credit card $7.95 for each issue after it's shipped.

Loadstar Products Order form 1-800-594-3370

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"old."

Fred Kruger explains the new network of about 70 commodore BBSs, which form a mini Commodore Internet, where mail, files and message bases are shared. Reportedly the Color 128 net will be growing so they will add boards in the near future. All other Commodore BBS networks are invited to link up. ❑

Newsletter Looking Sharper Lately?

Only a year or so ago I felt that a 300 dpi (dots per inch) laser printer, by virtue of being a laser printer, was tops in DTP quality. The newsletter is now rendered directly to film at 2540 dpi on a Linotronic image setter by *Pagemasters*, a service bureau in Shreveport. This allows me to include artwork that once looked blurred on my 300 dpi laser printer.

In the old days I couldn't include many multi-colored graphics because they would appear blurred unless printed at very large sizes. Naturally you've noticed that this newsletter isn't color, but color plays a big part in what you see.This is because of the way a monochrome printer shades a color picture.

When printing color on a monochrome printer, a program is forced to *dither* the picture. By "dither" I mean the use of more than one dot per color pixel represented on paper. So a black pixel would be represented by 16 out of 16 dots in a grid being black while gray would be 8 out of 16 dots. White would have no dots on. Colors in between would use various numbers of dots per color.

Some may have already considered that a 4x4 grid of sixteen dots (which is a tiny arbitrary dithering pattern for purposes of this article) would make a picture 4 times as wide and four times as deep. So when I try to size a color picture to the small size I need, there isn't enough room to fit the dither patterns in the area. The patterns overlap and the picture looks blurred. Bo Fain's picture, on page 3, looks fine now, with millions of dots to draw it, but on my 300 dpi draft, it's barely recognizable. You can barely make out Jim Brain as a human on page 5.

It seems quite decadent, but when you ean only fit 90,000 dots in a square inch at 300 dpi, you don't have all the room you need for shades. Thanks to Pagemaster's Linotronic, there are now over 6.4 million dots per square inch to dither with.

Complete Custom Printing, our printer in Bossier City LA, can take the film straight to press without losing a generation photographing paper pages. So far we've failed in all attempts to get them to change their company name to ***Compleat*** *Custom Printing*.

I'm experimenting now. Let me know if I go too far with my new boundaries. ❑

Super Pogo Stick

POGO STICK

The object of the game is to move about each maze, fixing the out-of-place bricks while avoiding various obstacles. When all of the bricks have been fixed, you are presented with a more difficult level. Each level contains elevators to assist in reaching the out of place bricks. There are several obstacles that endanger your pogo stick (such as pogo stunners and moving balls). Higher levels have more obstacles. Bonuses appear which add to your score and help to complete levels.

You must hurry in finishing each level because when the hourglass empties, you lose a pogo stick. The game ends when you run out of pogo sticks.

Learning to play **Pogo Stick** will only take a couple games but getting past level ten will take a considerable amount of practice.

SUPER POGO STICK

Like **Pogo Stick,** the object of **Super Pogo Stick** is to fix all of the out of place bricks before the hour glass empties. You must avoid various obstacles to reach the out of place bricks. Bouncing your way onto bonus items can add to your score and help you to complete levels.

Super Pogo Stick also adds the following features:
- 25 different mazes (with the ability to use even more).
- More obstacles (which includes snowmen and shovels).
- More bonuses (which includes extra time and a shield).
- The capability to save and load a game to disk (so you can slowly work your way up to higher levels, if you want).
- Keeps track of the 10 highest scores. You can also save and load the high scores to disk.

Both games are fast paced and have multiple levels (the games do not end when you reach the last maze). Both games run on a standard Commodore 64 or 128 (in 64 mode). Each program is supplied on a 5-1/4 inch diskette, so a 1541, 1571 or compatible disk drive is required. The keyboard or joystick (in either port 1 or port 2) is used to play the games.

Pogo Stick, $11.95 ($14.95 outside the US and Canada)
Super Pogo Stick, $11.95 ($14.95 outside US and Canada)
Pogo Stick and **Super Pogo Stick** together $19.95 ($22.95 outside the US and Canada)
Send check or money order, payable in US funds) to "Yanney Software" at:

Yanney Software
P.O. Box 224
Lebanon, PA 17042-0224

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Every month the LOADSTAR LETTER reaches thousands of active Commodore users. This is a perfect and affordable way to reach the customers you need for your product. An ad this size is only $25. In the past we haven't sought advertisers. Now we're prepared to allow the newsletter to grow as large as it has to be.

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The Underground is a bi-monthly publication with articles featuring reviews, PD/Shareware, BASIC and machine language tutorials, Geos, telecommunications, international stuff, news and tips. The Underground is a publication created by people who refuse to let their 8-bit computers gather dust, and is priced low enough for even the most frugal users. Try a sample issue to see if the Underground is worth your while. You'll be glad you did.

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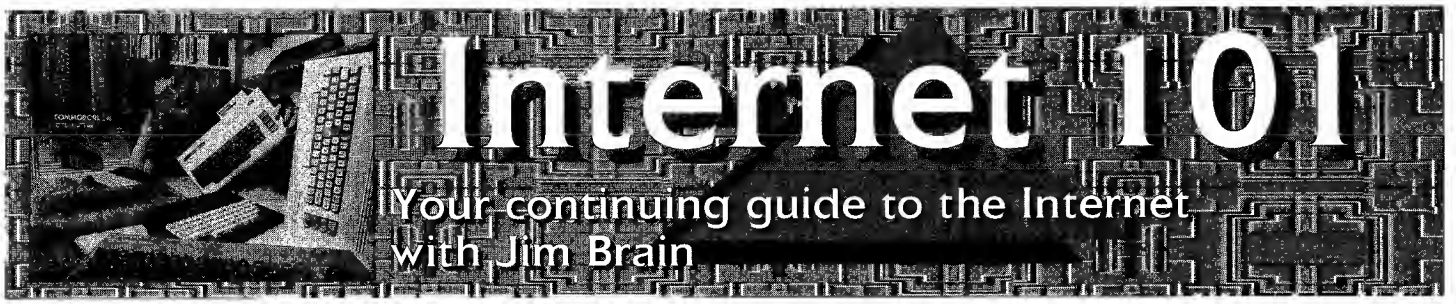


The Internet (which *should* always be capitalized) is a subject that was totally obscure until a few years ago, it now seems everyone and their brother is writing about the Internet, alias "Information Superhighway", alias "I-way", alias "the 'Net". Now it seems people that know nothing else about computers and computer networking can rattle off terms like *"TCP/IP," "SLIP," "Telnet," "FTP,"* and *"Mosaic."* Your friends are giving you their Internet electronic mail addresses, and you're stuck wondering how you could have missed being in on what appears to be the biggest thing to happen to computers since the microprocessor was invented.

Well, don't fret. My name is Jim Brain, and I am here to give you the information you need to become Internet savvy, do more with Internet buzzwords than just sprinkle them into conversations to impress people, and get real work done on the "'Net" while others talk about it. I had the fortune of attending college while the Internet went from nothing to something in the media, and used it before it became fashionable. Now, I spend my days holding classes to help real people get real work done on the I-way while still "having a life". Consider this series a correspondence course.

As with all such classes, a few ground rules need to be laid down. This is not meant to be a condescending series. Rather, it is a class for people who don't want to know *about* the Internet; they want to use it as a means to an end. The Internet is not for everyone. If it doesn't sound like it will help you in any way, then don't waste the time. Also, honesty will prevail. You've read the speculation, the theory, the editorials, and the sales pitches. If you haven't heard the bare truth about this subject before, you will when you finish the last article (if there is a final one). If it's easy, I will state that. If it isn't, you'll be warned. Comments and suggestions are encouraged. I don't intend to stand up here in front and lecture the whole time. Discussion in encouraged.

Internet Definition: The Internet is a multitude of computer systems of all types and sizes that are connected together with high speed modems and dedicated phone lines. The computers talk to each other using a standard language, called a protocol. The Internet protocol has a name, *Transmission Control Protocol/Internet Protocol.* However, the techno-dorks of the world, like me, prefer to reference it by its acronym, *TCP/IP.* Special programs running on each of these machines provide a number of valuable functions, like message transmission and reception (Internet email) and file exchange and retrieval (FTP). Each of these programs, called services, adhere to standard languages just like TCP/IP, although each of these service languages uses the TCP/IP language to communicate with each other. Users access different services on the Internet to gather or disseminate information of varied content. Because of the way the TCP/IP protocol works, if a machine is accessible by at least one other machine on the Internet, is accessible by all the machines on the Internet.

Internet History: Simple. It evolved. For all the bad things you can say about the government and its method of spending money, you can thank them for the initial Internet, called *ARPANet*, which was born in 1969. It grew up under the nurturing care of researchers, while the government, unaware that it was growing and becoming useful, ignored it. Thus, it was allowed the freedom to help people get work done faster. In 1992, the government decided to not fund it anymore, and the private sector took the adolescent Internet under its wing. That signaled the end of the Internet as an unnoticed research project and the beginning of the Internet as a commercial entity. You can thank the government again for deciding to cease funding it. Although the complete history of the birth and evolution of the Internet is fascinating to some (like myself), how it evolved and what people had a hand in its development are much less important than how it can be used as a tool. So, we will leave the complete history for another course.

Internet Size: The Internet is immeasurable in size. Believe me. In 1969, a total of 3 machines comprised the entire Internet for a time. Now, the best thing people ean do is estimate the size of the network. Also, this immeasurable network spans the entire globe. There are fewer than 10 countries that do not have any kind of Internet access. Obviously, the developed nations comprise the bulk of the total, but technology permits machines to be located anywhere in the world. So, not only is the Internet uncountable, it doesn't have a beginning and an end.

Internet Uses: Yes, it does have uses. This very article was delivered to Jeff Jones' hard drive via the Internet, not to make a point, but because that's the way we communicate with each other. At the most basic level, the Internet is a way to keep tabs on old friends, acquaintances, and relatives. Of course, they must also be on the Internet for this to work. Some people use the Internet to gather information for personal or corporate reasons, and others use the great wealth of programs available on the 'Net to automate computer-related tasks. Because the Internet is not a single user service, but rather a collection of user services, the Internet can be used for a wide variety of tasks, some of which we haven't even thought of yet. At the same time, the Internet does not provide all possible services at present. 500 channel cable and videoconferencing for the masses are just two things that people just can't get on the Internet of today. Nonetheless, the Internet continues to grow, and it may someday be able to handle all the tasks we wish to accomplish.

Internet Prerequisites: Before you can attempt to explore this entity called the "Internet," you must have a few basic essentials. The following items are required:

A computer system which can support a modem of some type.

(All Commodore computers except the Commodore C-16 and C-116 easily qualify).

A modem of some speed (Modems are measured in speed, and the faster modems will help information make the travel to your computer much faster, not to mention help with the telephone bill).

A telephone line.

A provider of Internet connectivity (*Called an Internet Service Provider,* or *ISP*).

Some suitable software to drive the modem and display the information (For most people, this software is a simple telecommunications program, while for others it is a more complex pieee of software called a *protocol translator,* or *"protocol stack"*).

That is it. Most of the readers of this article most likely own a machine which

can be used, and at least some will own the modem and the software. Don't let the local salesperson at CompUSA convince you that you need a brand new, 1990s technology, possibly intimidating PC or Macintosh. The computer you have, if it fits the above criteria, will work just fine. If you own a PC or Macintosh, this series of articles applies equally well to you, as you will notice that no one can tell the computer you use on the Internet.

Internet Truths #1: Let's spend a moment on this computer usage item. How many times has someone gone into a computer store lately to buy a peripheral for a Commodore computer, only to have the salesperson either claim *such a unit cannot work with a Commodore,* or laugh so hard he or she had to be calmed? Anymore, I suggest people leave the "Commodore" name out of the conversation, as that just causes more grief than good. Remember that when following the examples in this series. What the "PC"-centric don't know won't hurt them. Also, note that, on the Internet, no one can see you or the computer you are using. They won't know unless you tell them.

Consider a piece of paper. If someone hands me a nicely typed piece of paper, I cannot tell whether that person owns a 1954 Smith-Corona, a Pentium-100 with Word for Windows 6.0c, or a set of printing type and a good eye. All I really know is that the end result, the paper, is very presentable. Such as it is with the Internet. This has advantages for those who regularly use seemingly "extinct" computers. So, the Commodore user can concentrate on presenting the idea without having to constantly defend the physical machine.

Internet Providers: Enter the *Internet Service Provider (ISP).* The link that bridges your machine and the Internet together is the last item in the list of necessary items. It is also the one which is hardest to decide on. An ISP is a machine that allows a home computer to dial into it and then relays all of the information from the Internet back to that home computer. The problem: There are so many, and each offers its own slant on this basic definition. However, the providers all fall into some major categories:

Commercial Services Examples: Notes: If you want to use your Commodore, count AOL out, as it requires a PC or Macintosh. Pros: Very reliable, lots of support, has non-Internet information and services, many local dial in phone numbers to use. Cons: Can be more expensive, might require long distance access, menu system can be hard to navigate and inflexible.

Bulletin Board Systems: The local BBS system in your friend's house. Pros: Very inexpensive, small town atmosphere. Cons: Can be unreliable, minimal support, menus can be hard to navigate and inflexible, and possibility of only one phone line to use, which implies difficulty in access.

Regional Internet Providers: Examples: MSEN, CRIS, The WELL, NETCOM, PSI, etc. Notes: Not as well advertised as the Commercial Providers. Pros: reliable and supported, usually is local call, many dial in phone numbers, and lots of flexibility. Cons: Flexibility can translate into difficulty of use, not as reliable as bigger services, and support varies.

It is beyond the scope of any series to list every ISP available to a person. However, a few rules will help the search prove fruitful. The Commercial Services all have 800 numbers. Call and inquire. A local user group will likely have a list of BBS systems with Internet access. Friends and acquaintances with Internet access will know what regional providers exist in your area. Don't discuss a lot over the phone. At this point, you may not know what questions to ask. Ask for literature and brochures and information on any newly announced services. If you have a service, you may want to re-evaluate your choice of Internet Provider. The Internet Provider business is becoming very competitive, and the consumer stands to benefit.

The Internet Commodore: Some people ask, "Why do I need to be on the Internet if I own a Commodore? Most of the people on there own new computers." I can't fully answer that question, but here are some things that may interest you:

Three discussion forums in which to discuss Commodore related information are already a part of the Internet. 10-30 Internet electronic mailing lists provide a similar arena for discussion on the 'Net. A lengthy list of Internet resources that provide access to Commodore programs, data files, plans, schematics, projects, disassembles, and general information. A large number of Commodore owners with which to share ideas, discuss topics, receive up-to-date information about Commodore computers, and ask questions of.

In a sense, the Internet has become the meeting place for the Worldwide Commodore User Group, and you can be a member just by accessing the Internet, the file library is huge, the meetings are never dull, and you can be president if you want.

As I hear the school bell ringing, I shall dismiss class. However, note your homework for next time, printed on the board:

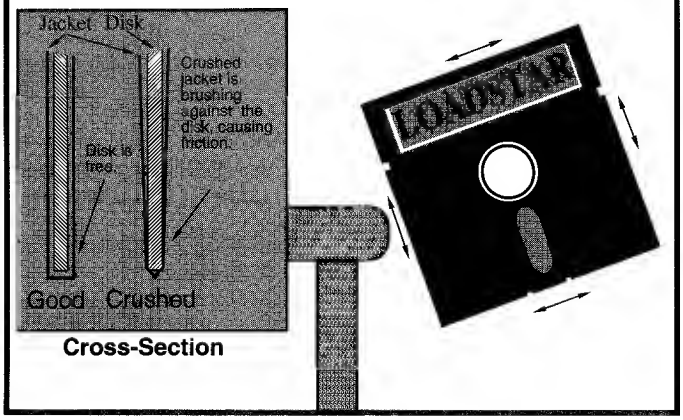
Start checking on Internet providers in your area. See if you own a modem, and start researching a good one to buy if not. Write a 100 word essay entitled: "What I want to accomplish on the Internet". Hand it in to Jeff Jones or Fender Tucker before the next class period. Revamp that home budget to see if a monthly $10-$30 fee for Internet access is possible. Note the result of your findings when researching Internet providers.

Until next class...

Until Next Month...

Disk Trouble?

Every copy of LOADSTAR leaves Softdisk as a verified okay disk set. 3.5-inch disks are virtually trouble-free because they are difficult to damage, even when mishandled. Unfortunately some 5.25-inch disks may become crushed in the mail and give READ ERRORS because they have trouble spinning. Fixing these crushed disks is quite easy. Just run the areas indicated along a hard edge such as a table. This should uncrimp the disk.



Letters To The Editor

Via LOADSTAR's BBS 1-318-425-4382. Internet: loadstar@genie.geis.com.

From: HIMROID
Dear Jeff & Fender,

I can't find a flexible program that allows for fluctuating interest rates. I have a "deferred compensation" account through my employer and the interest is compounded quarterly. For the sake of simplicity:

If I put $600.00 per quarter in the account and it earns 7.5%, the interest earned is then added to the principle. (? p$=principle * i$=interest+p$) That sum + the next quarter's investment is again multiplied by the interest, and so on and on. Occasionally the interest rate will drop or jump by as much as three tenths. Here's my problem. I keep getting redimmed array errors and my basic math formulation isn't computing. I am not a skilled programmer. I want to be able to project out as far as 25 years or so with the account and get a print out of the projection. The flexibility must account for my investment rate fluctuating as well as the interest rate. Do you know of any financial programs currently available for the 64/128 that will allow this type of flexibility? I am trying to write this myself but I don't have the expertise. I have written basic outlines of the program in text form but by using the programmer's reference guide and a few other reference's I am still falling hopelessly short of my mark. What do you or Fender recommend?

Jeff: Here's your answer, excerpted from an article by Marty Matthews in ***The Compleat Programmer*** *(advertised on page 3), which addresses your question complete with runnable example programs. Before I get to Marty, your redimensioned arrays are because somehow your program is going back to the lines that dimension your arrays. Place your dimension statements near the beginning of your program, before any loops or main logic engines.* ***Never*** *dimension more than once. Not unless you CLR or reRUN the program.*

Marty: There are two formulas one for a single payment accumulation and one for the periodic investment of a fixed amount. The first formula is the "Amount at Compound Interest", and the second is the "Amount of an Annuity".

The formula for Compound Interest looks like this:

T = A * ((1 + R/Q) ^ (Y*Q))

and, the formula for the Amount of an Annuity looks like this:

T=A*((((1+R/Q)^(Y*Q+1))-1)/(R/Q)-1)

T is the total amount

A is either the single payment or each periodic payment,

Y is the number of years,

R is the interest rate per year,

Q is the number of payments or compoundings per year.

The solution with respect to T or A is relatively simple if we have all the other variables. The formulas as they appear above will produce T. To calculate A, instead of multiplying the rest of the right hand side of the equation by A, divide it into T.

R, the rate of interest, and Y, the number of years, are more complicated to calculate. We have to use the traditional "split-the-difference" method. The subroutine in both situations starts with an estimate, calculates, then divides the difference by two until the difference is less than the tolerance allowed...

From: MARCO

I've logged on for the first time from an IBM PC with a 14400 bps Modem. Is there an advantage if I use my C-128 with a 2400 BAUD Modem. Should I get the User Port converter to use my Hayes Modem with my C-128? Since I've logged in this time I expect to go back over all of my LOADSTARs, Gazzettes & other reference material to sharpen my skills at this telecommunications stuff.

Jeff: Our BBS is stuck at 2400 baud because the faster patches don't work with our particular modem. BBSs are blind to the computer you use. Use whichever computer suits ***you*** *the best. You seemed to type your letter fine. It shows that you can navigate your way through new territory fine. I suggest finding a local BBS or two (with different systems) and navigate toll-free for a while. You'll be a jaded tele-user in a month or two.*

From: BIGGIE

I was just wondering, now that Loadstar has this BBS where one can get files from LS? then you guys maybe also have a place on an internet server where I can get the files instead? It is much cheaper for me, hehe.

Jeff: The BBS exists mainly as an avenue for our subscribers to contact us. The download libraries are sparse compared to most BBSs. We do have our sample issues online. As sysop, I don't check for new uploads often, and would actually like to disable the feature. Our message base is pretty busy, but only because we network with 75 other BBSs.

We do have a web page, but since the address will change in a month or so, I will hold off on publishing the current address. I'm going to archive a few sample programs for access at the page. You ***can*** *get to our page from Jim Brain's page since they're linked. So I'll give you Jim's Web address, which shouldn't change any time soon.*

http://www.msen.com/~brain/

Your telecom package should let you know what key combinations get you a tilde (~).

From: FLYING FINGERS

I would like to commend you for keeping the Commodore in active status. Most boards laugh at the Commodore (IDIOTS!!). Anyway, I am a member of the *UNKNOWN CAVE BBS* in NYC. If there is a way, I'd like to personally recommend this board to you at LOADSTAR and to anyone in the metro NYC area. The SYSOP, THE CAVEMAN, is a very good person and keeps his board running a tip-top shape. THE UNKNOWN CAVE's number is 718-359-8491.

I also subscribe to LOADSTAR and I love it. I am currently 'reading' your COMPLEAT PROGRAMMER package. One day I may be submitting a program to you guys. We'll see...

Jeff: I'll pass this information along to everyone who reads the LOADSTAR LETTER. I'll also give the BBS a call.

From: EDWARD

I am still having problems setting up the auto logon for Dialogue 128. When I press the program function keys for my ID and Password it sends extra characters.

Jeff: I generally can't help with most programs that LOADSTAR doesn't publish, especially those I haven't used. I can say that it is nearly impossible to log on auto automatically to this BBS since the question after your password alternates between five pieces of personal information. I do think that you can program Dialogue to look for certain prompts and respond accordingly, but I don't know for sure. I suggest doing what you're doing: going the F-key route, but if it doesn't work, you need to talk to an expert on Dialogue, not me. Until then, you'll have to type in your password manually. ❑

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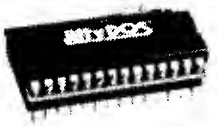

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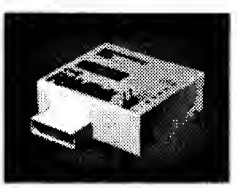

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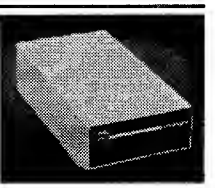
The fastest possible form of storage, RAMLink provides instant access to files and retains data while your computer is turned off. Easy to use and expandable up to 16 MB, RAMLink utilizes the same powerful operating system found in CMD Hard Drives. Unlike Commodore REU's which are compatible with less than 1% of commercial software, RAMLink supports more than 80% of the commercial titles. RAMLink also offers built-in JiffyDOS Kernal, SWAP feature, reset button, enable/disable switch, pass-thru port and RAM port for REU/GEORAM use. RAMLink offers maximum speed, expandability and compatibility with all types of software and hardware including GEOS.

HD Series



SCSI Hard Drive for the C-64/128

HD Series Hard Drives are available in capacities up to 1 GB, are fully partitionable, and can emulate 1541, 1571, & 1581 disks while Native partitions utilize MSDOS-style subdirectories. HD's connect easily to the serial bus or parallel via RAMLink. Includes built-in JiffyDOS, SWAP feature and RTC. HD's offer superior compatibility with most commercial software including BBS, Productivity and GEOS. And with new pricing, HD Series drives offer the lowest cost per megabyte of any C64/128 storage device.

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Usa tha chart balow to match your order subtotal with your shipping zone end method.

	Continental United States					
Order Subtotal	**UPS Ground**	**2nd Day**	**Next Day**	**AK HI, PR**	**Canada**	**Foreign**
$0.01 - $19.99	$3.00	$8.00	$17.00	$12.00	$5.00	$15.00
$20.00-$29.99	$5.00	$9.00	$18.00	$14.00	$7.00	$20.00
$30.00-$59.99	$6.00	$10.00	$20.00	$15.00	$9.00	$25.00
$60.00-$149.99	$8.00	$12.00	$23.00	$19.00	$12.00	$35.00
$150.00-$299.99	$10.00	$14.00	$27.00	$21.00	$20.00	$50.00
$300.00-$799.99	$15.00	$20.00	$34.00	$27.00	$25.00	$55.00
$800.00 +	$20.00	$25.00	$40.00	$32.00	$35.00	$60.00

UPS C.O.D. add $5.00 (U.S./PR only)

Creative Micro Designs, Inc.
P.O. Box 646
East Longmeadow, MA 01028
Info: (413) 525-0023
Fax: (413) 525-0147

Payment and Delivery: CMD accapts MC, Visa, Monay Ordars, COD and Parsonal Checks. Personal Checks are hald for up to 3 weeks. Most items are stock, contact CMD for currant delivery schadulas. Raturns for merchandise credit only within 30 days with prior authorizetions. All prices end specifications are subjact to change without notice.